

# STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY LANSING



April 25, 2014

TO:

All Interested Citizens, Organizations, and Government Agencies

SUBJECT:

FINDING OF NO SIGNIFICANT IMPACT

Ottawa County - Park West Drainage District

Nonpoint Source Project - Construction of Bioswales

State Revolving Fund Project No. 5591-01

The purpose of this notice is to seek public input and comment on a preliminary decision by the Michigan Department of Environmental Quality (DEQ) that an Environmental Impact Statement (EIS) is not required to implement recommendations discussed in the attached Environmental Assessment of a nonpoint source pollution control project plan submitted by the applicant mentioned above.

#### HOW WERE ENVIRONMENTAL ISSUES CONSIDERED?

Part 53, Clean Water Assistance, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, being Sections 324.5301 to 324.5316 of the Michigan Compiled Laws Annotated, requires the DEQ to evaluate all environmental implications of a proposed wastewater project. The DEQ has done this by incorporating a detailed analysis of the environmental effects of the proposed alternatives in its review and approval process. A project plan containing information on environmental impacts was prepared by the municipality and reviewed by the State. The DEQ has prepared the attached Environmental Assessment and found that the proposed project does not require the preparation of an EIS.

# WHY IS AN EIS NOT REQUIRED?

Our environmental review concluded that no significant environmental impacts would result from the proposed action. Any adverse impacts have either been eliminated by changes in the project plan or will be reduced by the implementation of the mitigative measures discussed in the attached Environmental Assessment.

# **HOW DO I GET MORE INFORMATION?**

A map depicting the location of the proposed project is attached. This information is also available on our website at <a href="www.michigan.gov/cleanwaterrevolvingfund">www.michigan.gov/cleanwaterrevolvingfund</a> under "Related Links." The Environmental Assessment presents additional information on the project, alternatives that were considered, impacts of the proposed action, and the basis for our decision. Further information can be obtained by calling or writing one of the contact people listed below.

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### **HOW DO I SUBMIT COMMENTS?**

Any comments supporting or disagreeing with this preliminary decision should be submitted to me at DEQ, Office of Drinking Water and Municipal Assistance, Revolving Loan Section, Constitution Hall, P.O. Box 30241, Lansing, Michigan 48909-7741. We will not take any action on this project plan for 30 calendar days from the date of this notice in order to receive and consider any comments.

# WHAT HAPPENS NEXT?

In the absence of substantive comments during this period, our preliminary decision will become final. The applicant will then be eligible to receive loan assistance from this Agency to construct the proposed project.

Any information you feel should be considered by the DEQ should be brought to our attention. If you have any questions, please contact Jaclyn Merchant, the project manager, at 517-284-5412, or you may contact me. Your interest in this process and the environment is appreciated.

Sincerely, Langu T. Bully

Sonya ♥. Butler, Chief Revolving Loan Section

Office of Drinking Water and Municipal Assistance

517-284-5433

Attachments

# ENVIRONMENTAL ASSESSMENT STATE REVOLVING FUND (SRF) OTTAWA COUNTY PARK WEST DRAIN NONPOINT SOURCE PROJECT – CONSTRUCTION OF BIOSWALES APRIL 2014

# **PROJECT IDENTIFICATION**

Applicant:Ottawa County

12220 Fillmore

West Olive, Michigan 49460

Authorized Representative: Mr. Joseph Bush

Ottawa County Water Resources Commissioner

SRF Project Number: 5591-01

# **PROJECT OVERVIEW**

The Ottawa County Water Resources Commissioner intends on installing bioswales along portions of various roads located in Park Township. The installation of bioswales will help alleviate nutrient loading and water quality issues in the local water systems, which in turn drain to Lake Macatawa and on to Lake Michigan.

The estimated project cost for the selected alternative is \$3,460,000. The Commissioner is seeking a low-interest loan (2.5 percent for the 2014 fiscal year) through the state of Michigan's SRF program, administered by the Michigan Department of Environmental Quality (DEQ), for the bioswales installation project. Ottawa County, Ottawa County Road Commission, and Park Township will pay an "at large" assessment that will total approximately 25 to 50 percent of the total cost. The remaining cost will be paid by the 2,154 parcel owners within the Park West Drainage District. It is estimated to be an average cost of between \$913 and \$1,336 per property owner. The project qualifies as a green project and is eligible for principal forgiveness totaling approximately \$1,730,000. With principal forgiveness, cost to parcel owners will be less than estimated.

# PROJECT BACKGROUND

The Park West Drainage District is located in Park Township, Ottawa County. The district is located in the southwest portion of Ottawa County on the north side of Lake Macatawa. The study area is bounded on the west by 168<sup>th</sup> Avenue, on the north by New Holland Street, on the east by 152<sup>nd</sup> Avenue, and on the south by Ottawa Beach Road (see Figure 1). The 6-square-mile district drains to Winstrom Creek, a tributary to Lake Macatawa. The designated county drains within the district include: Winstrom Creek, Blueberry Drain, Jalving Drain, Number 23 Drain, Number 53 and 20A Drain, Number 32 Drain, and Number 53 Drain. There are several storm sewer systems and detention basins managed by the Commissioner within the Park West Drainage District as well.

Waterways in the district flow from north to south, discharging to Winstrom Creek into Lake Macatawa, which in turn empty into Lake Michigan. In the northern part of the district, groundwater generally flows from east to west, toward Lake Michigan; and in the southern part

of the district, groundwater generally flows south toward Lake Macatawa. Generally, stormwater is managed in residential areas with storm sewer systems mostly discharging to detention or retention ponds. In the northern portion of the district, at Estates Drive, a stormwater pump is used to discharge stormwater into a road ditch flowing east on Quincy Street to the Blueberry Drain. The majority of stormwater runoff in other areas becomes overland flow using road ditches as conveyance. There have been no efforts in this district to improve the water quality of stormwater runoff.

# PROJECT NEED

Lake Macatawa is not reaching Michigan water quality standards and so is listed on the state of Michigan's non-attainment list due to pollutant levels. This is due in large part to excessive levels of phosphorus and sediment, causing blue-green algae blooms and frequent beach closures. Many local organizations have been working together for years to improve water quality at Lake Macatawa. One of the goals is to meet the requirements of the established total maximum daily load (TMDL) in the Lake Macatawa Watershed. A TMDL assigns limits on pollutants discharging to the watershed so that water quality and aquatic habitats will be improved. A Watershed Management Plan was approved in 2012, which in part, identified three goals: 1) restore water quality to meet state water quality standards and the TMDL; 2) Protect natural areas for water quality improvement; and 3) enhance the watershed for desired uses that are of community importance (recreation, public access, fish and wildlife, and open space).

DEQ water quality studies have shown that total phosphorus loading to Lake Macatawa is approximately 138,000 pounds; 91 percent of which is contributed by nonpoint sources primarily during storm events. Nonpoint source pollution generally comes from land runoff, precipitation, drainage, or seepage. The Clean Water Act defines nonpoint source pollution as any source of water pollution that does not meet the legal definition of point source pollution (a discernable, confined, and defined source of pollution such as a pipe, well, or conduit).

As part of the Watershed Management Plan, the DEQ developed a Hydrologic Study of the Macatawa Watershed and determined the existing sediment and nutrient pollutant loads. Based on that study, the following table was extrapolated for just the Park West Drainage District:

Sub-basin	Area (acres)	Total Phosphorus (lbs)	Total Suspended Solids (lbs)	Total Nitrogen (lbs)
Lake Macatawa Direct Drainage	15,967	7,920	1,659,901	49,020
Park West Drainage District	3,800	1,900	437,000	12,540

The table shows that the Park West Drainage District is contributing to the water quality issues at Lake Macatawa. Increases in impervious surfaces have a direct impact on water quality. As development continues in the district, water quality will continue to deteriorate unless stormwater runoff is addressed. The two pollutants of highest concern are phosphorus and sediment.

# **ALTERNATIVES CONSIDERED**

Several alternatives were considered to determine the best option to address the Park West Drainage District stormwater quality issues noted previously. The no-action alternative was rejected because it would not result in an improvement to water quality in the Macatawa Watershed.

Two principal alternatives were considered: Alternative A, installation of new storm sewer; or Alternative B, stormwater management with green infrastructure.

Alternative A would call for stormwater runoff to be diverted to approximately 42,000 feet of storm sewers with the installation of a stormwater outfall into Winstrom Creek at Perry Street. Total project cost of this option is estimated at \$7,056,000.

Alternative B consists of installing bioswales, or grassed infiltration swales along 160th Avenue, Riley Street, Greenly Street, and Quincy Street. Bioswales are ditches or depressions in which stormwater runoff is collected and allowed to infiltrate, following a rain or snow event. When installing bioswales, some excavation and grading will be done. Bioswales provide stormwater treatment and retention as stormwater moves from one place to another. They slow, infiltrate, and filter stormwater flows. Total project cost of this option is estimated at \$2,560,000

The following table compares the advantages and disadvantages associated with each alternative:

	Alternative A	Alternative B
Advantages	Minimal flooding relief after storm events	<ul> <li>Improvement in stormwater water quality</li> <li>Reduces erosion and reduces peak runoff flows</li> <li>Minimal impact to wetlands</li> </ul>
Disadvantages	<ul> <li>Major disturbance due to installation of storm sewer</li> <li>Wetlands likely to be impacted</li> <li>No water quality benefit</li> <li>Greater amount of negative impacts to Winstrom Creek</li> </ul>	Small disturbances associated with installation of bioswales

Alternative B has the greatest advantages with the least disadvantages. It is also the most costeffective alternative. For this reason, Alternative B was selected. An estimate of the costs associated with Alternative B is shown below:

Item	Cost
Installation of Bioswales	\$2,560,000
Historic Planning Costs	\$900,000
Total	\$3,460,000

A great deal of work has gone into planning a stormwater project for the Park West Drainage District. The Ottawa County Water Resources Commissioner would like to include historic planning costs totaling approximately \$900,000 in the SRF loan.

# **USER COSTS**

The estimated project cost for the selected alternative is \$3,460,000. Ottawa County, Ottawa County Road Commission, and Park Township will pay an "at large" assessment, which will total approximately 25 to 50 percent of the total cost. The remaining cost will be paid by the 2,154 parcel owners within the Park West Drainage District. It is estimated to be an average cost of between \$913 and \$1,336 per property owner. The project qualifies as a green project and is eligible for principal forgiveness totaling approximately \$1,730,000. With principal forgiveness, cost to parcel owners will be less than estimated.

# **ENVIRONMENTAL IMPACTS**

Construction impacts associated with the proposed project are expected to be short-term. These impacts include construction vehicle traffic, noise, dust, emissions from equipment, increased erosion potential, and disruption of normal traffic flows. All contractors will be required to comply with a program for control of soil erosion and sedimentation, which will include the use of controls such as straw bales, sedimentation basins, and silt fences. Construction equipment will be maintained in good condition to decrease noise and emissions.

The Michigan Natural Features Inventory (MNFI) and the U.S. Fish and Wildlife Service webpage have been consulted to determine if listed species would be impacted. The MNFI review found that it is likely the spotted turtle will be impacted. The spotted turtle is a state threatened species and has been known to occur in the area. The spotted turtle is a small turtle ranging from 3.5 to 5.4 inches. It can be easily identified by the small, round yellow spots on its broad, smooth, black or brownish-black carapace. Although considered aquatic, these turtles are frequently found on land in open habitats, especially during mating and nesting seasons. During the design phase of this project, a biological survey will be conducted to ensure that the project will minimize or avoid disturbance to the listed species. Also if, during the design process, it is found that construction will encroach upon wetlands or floodplains, permits will be acquired.

Beneficial impacts resulting from the project include improved stormwater water quality. The project will also create construction jobs.

The State Historic Preservation Office was contacted, and it was determined that there would be no adverse effect on historic properties within the project area as a result of this project. The Tribal Historic Preservation Officers that may have historical, religious, or culturally significant resources in the area were contacted and none expressed any concerns. It has, therefore, been determined that there will be no impact on religious/cultural resources from the construction of this project.

# **PUBLIC PARTICIPATION**

A public hearing to discuss the proposed project was advertised, held, and recorded according to SRF program guidelines. The hearing was advertised on May 17, 2013, in the *Holland* 

Sentinel, and the hearing was held on June 19, 2013, at 4 p.m. at the Ottawa County Fillmore Complex. A copy of the project plan was available for public scrutiny at the Ottawa County Water Resources Commissioner's office. At the public hearing, many people spoke against the project. Previously, a project was proposed in the Park West Drainage area that called for a system that would draw-down the water table. This was considered ineligible for SRF funding, and so is not part of the final selected project. There was some confusion at the public hearing, however, and a majority of the concerns had to do with issues with drawing-down the water table. Other comments specifically referenced flooding issues, which this project also does not address. Community members also spoke against the project, stating that they believed the project is simply unnecessary. Other commenters have said the project costs too much, and residents of the Park West Drainage District will be unfairly burdened with the cost. Still others have written and spoken in support of the project, saying that the benefits outweigh the costs.

A resolution adopting the final project plan was approved by the Ottawa County Water Resources Commissioner on June 25, 2013.

# REASONS FOR CONCLUDING NO SIGNIFICANT IMPACT

The DEQ has determined that there will be no significant impact as a result of the proposed project. The primary purpose of the project is to address pollutants in the Macatawa Watershed. Construction impacts are minimal and will be mitigated using sedimentation control methods and proper construction practices. Public health and safety benefits from the project are expected to greatly outweigh the short-term construction impacts.

Questions regarding this Environmental Assessment should be directed to:

Ms. Sonya T. Butler, Chief
Revolving Loan Section

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